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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,443	11/25/2003	Hubertus M.J.M. Boesten	0142-0439P	4538
2292 7590 04/29/2008 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				
EXAMINER ZHENG, JACKY X				
ART UNIT 2625		PAPER NUMBER		
NOTIFICATION DATE 04/29/2008		DELIVERY MODE ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Advisory Action
Before the Filing of an Appeal Brief

Application No.

10/720,443

Applicant(s)

BOESTEN ET AL.

Examiner

JACKY X. ZHENG

Art Unit

2625

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 28 March 2008 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
The status of the claim(s) is (or will be) as follows:
Claim(s) allowed: _____.
Claim(s) objected to: _____.
Claim(s) rejected: _____.
Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See Continuation Sheet.

12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). _____
13. ☐ Other: _____.

/Twyler L. Haskins/
Supervisory Patent Examiner, Art Unit 2625

/J. X. Z./
Examiner, Art Unit 2625

the argument presented by Applicant are respectfully found to be not persuasive with respect to the outstanding issues, such as the prior art rejection under 35 USC 103 and "Responses to Arguments" set forth in office action mailed on December 28, 2007. As the issue relating to the claim rejections set forth in the office action previously have not yet been resolved, and the claims have also not been amended for overcoming the issues, Examiner respectfully submits that merely the arguments presented (after Final Rejection) not yet placing the application in condition for allowance, the grounds of rejection are thus maintained for reasons of record. Responses to arguments set forth previously are also believed to be applicable, therefore also replicated and provided as below:

"10. In re Applicant's remarks from Page 9, 3rd Paragraph to Page 10, 1st Paragraph, with regard to the rejection under 35 U.S.C. §103(a) regarding Claims 1-19, Applicant asserts that "Bares reference does not disclose forming a cumulative histogram and determining from said histogram whether the image is a monochrome image or a color image". Applicant's argument(s) are fully considered, however found to be not persuasive for at least the following reasons.

a. First, Examiner agrees that Bares does not explicitly disclose the step of forming the "a cumulative histogram". However, in consideration of the entire disclosure and teachings of Bares, and particularly the following citations (but not limited to), in "Summary of Invention", Paragraph [0009], "...with another aspect of invention, the pixels are classified by determining a count of the reduced image pixels having values above a color threshold and classifying the image as one of color and neutral (or monochrome) as a function of the count", in addition to the other teachings (but limited to) of Bares, such as: Bares discloses an invention relates to classifying an image as a color or neutral (monochrome or black/white) image by observing the respective values associated with the pixels in the image; first, Bares discloses a limitation of usage of "neutral axis" (or "L* axis" or "gray axis") in the disclosure (i.e. as illustrated in Figure 1, Part 22); Bares further discloses the limitations of process of "Determine Distances" (i.e. Figure 2, Step 84 & Paragraph [0032]), process of "Determine Count" and compare the value the to the predetermined threshold range (i.e. Figure 2, Step 86 & Paragraph [0033]), and the process of "Classify" (i.e. Figure 2, Step 90 & Paragraph [0034]) for classifying the image data to be either color or neutral (monochrome); and also

discloses the limitation of transforming the image data in one color space to another, such as from RGB color space to a $L^*a^*b^*$ color space (*i.e.*

Figure 2, Step 70). A histogram, which is commonly known and practiced by one of ordinary skill in the art in area of image processing, as a representation of the distribution of colors in an image, which can be simply done (but not only) by counting the number of pixel that will satisfy the specific preset conditions (or simply a predetermined threshold or range) and generate a visual representation generally in form of graphs. So, in considerations of explicit disclosure from Bares that the pixels in the images can be classified as one of color and neutral (or monochrome) as a function of the count and the explicit and *substantially-identical* steps recited in Figure 2 of Bares, and well-know method of using a histogram for image or pixel classification, Examiner submits that it would *still* be obvious for one of ordinary skill in the art to comprehend and implement based on explicit limitation disclosed by Bares "classifying the image as one of color and neutral as a function of count" in a form of histogram, even if there is no explicit and direct disclosing of such a limitation.

b. Second, for purposes of advancing the prosecution and further illustration of the abovementioned point of utilization of "a histogram" is being conventional and well-known in the art, a prior art among the many others previously cited in the section of "Conclusion" of the first action on the merit mailed on July 17, 2007, U.S. Patent No. 5,786,906 (hereinafter as "Shishizuka", filed in 1994 and patented in 1998), drawn to an invention of color or monochrome judgment of input image, will be used herein for purpose of discussion only (which is also herein indicated by Examiner, citing of Shishizuka is not for intending of a new ground, instead, a purpose of discussion in view of advancing the prosecution). Shishizuka, among the many others, drawn to a method and apparatus to provide a function of judging whether an image (or pixels in the image) is color or monochrome. Figure 17 in Shishizuka, *inter alia*, clearly disclose the limitation of performing a "Count Histogram" in Step S405, to be a part of judging processing of whether an image is color or monochrome, and further perform corresponding processes.

Therefore, for at least the reasons set forth above, Examiner submits the claims are remained unpatentable over the prior arts of records, and the rejection made under 35 U.S.C. §103(a) over Bares and Smilansky with regard to claims 1-19 is remained proper and therefore maintained.

11. In re Applicant's remarks on Page 10, 2nd – 3rd Paragraphs, with regard to citing of prior art, Smilansky. Applicant asserts that "there is no suggestion or indication to combine" Smilansky with base reference, Bares. Applicant's argument(s) are fully considered, however found to be not persuasive for at least the following reasons.

- a. Without acquiesce to Applicant's assertion, Examiner further clarify that Smilansky was solely relied on with respect to the limitation of "applying a linear regression analysis" and/or corresponding related limitations.
- b. In addition, assuming *arguendo*, that the two prior arts of record are not combinable, either a limitation, applying or using of "linear regression analysis" would be well-known and conventional in field of Mathematical Statistics, and also to one of ordinary skill in the art. The earliest form of linear regression, was done by method of least squares, which can at least dated back to 1805 by a French mathematician, Adrien-Marie Legendre (also, for purpose of brevity, discussion over the prior art for illustration of conventionality will not be shown, however it will be available upon request).

Therefore, for at least the reasons set forth above, the rejection made under 35 U.S.C. §103(a) over the prior arts of record with regard to claims 1-19 is remained proper and therefore maintained. "

In addition, with respect to Applicant's argument of "Bares nowhere discloses determining a distance from each of the real pixels of the image to the neutral axis 22...". Examiner respectfully submits that claim languages have not required the pixels to be either "real" or "fake", in fact, reciting exactly "determining for each pixel of said pixelised image a shortest distance to said gray axis..."(as in claim 1), thus broadest reasonable interpretation should deemed to be proper.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacky X. Zheng whose telephone number is (571) 270-1122. The examiner can *normally* be reached on Monday-Friday, 8:30 a.m. - 5 p.m., Alt. Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler M. Lamb can be reached on (571) 272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available

through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jacky X. Zheng/

Jacky X. Zheng
Patent Examiner
Art Unit: 2625
April 18, 2008